## **REMARKS**

Favorable reconsideration, reexamination, and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks. The foregoing amendments are made to further clarify the invention, and do not introduce new matter. Support for the amendments can be found, at least, in the original claims, and in paragraphs [0034] – [0037], and [0072] – [0081].

## Rejection under 35 U.S.C. § 112, first paragraph

In the Office Action, beginning at page 3, Claims 1-8 were rejected under 35 U.S.C. § 112, first paragraph, as reciting subject matters that allegedly fail to comply with the enablement requirement. Applicant respectfully requests reconsideration of this rejection.

Applicants respectfully submit that the basic premise of the rejection is faulty, in that the genes which are being made deficient are not intended to be able to encode a functional protein. In fact, exactly the opposite is true; in that the genes are deficient so that their expresssion is inhibited or even eliminated. Therefore, the statement on page 4 of the Office Action, "[t]here is no guidance provided as to which nucleic acids can be deleted or substituted and [sic] encode polypeptide still has its biological function," is incorrect, since no biological function is trying to be maintained for the objective genes. Similarly, the arguments that modifications to a gene or protein sequence are unpredictable with regards to structure and function do not apply to the instant claims, since deletion of a target gene sequence is well within the skill in the art, and no function is trying to be maintained by any modification.

For at least the foregoing reasons, Applicant respectfully submits that Claims 1-8 fully comply with 35 U.S.C. § 112, first paragraph, and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 112.

## Rejection under 35 U.S.C. § 102

In the Office Action, beginning at page 6, Claims 1-8 were rejected under 35 U.S.C. § 102(b), as reciting subject matters that allegedly are anticipated by Ishii et al. Applicant respectfully requests reconsideration of this rejection.

Claim 1 has been amended to incorporate the features of claim 8. Ishii et al. does not disclose or suggest a *Bacillus* bacterium which is deficient in a gene or genes selected from the group consisting of the *purR* gene, the *purA* gene and the *deoD* gene, and combinations thereof. Furthermore, this limitation is not a process limitation, as suggested by the Office Action, since there are no recited method or process steps, nor is there any implication of such, but this limitation recites a characteristic of the product bacterium. For example, this limitation clearly implies a structural deficiency of the claimed bacterium, i.e. that it lacks the presence of one or more of these genes. The cited reference fails to teach this limitation, and there is no indication that such a feature would be inherent. Therefore, the claimed invention is not anticipated by the cited document.

For at least the foregoing reasons, Applicant respectfully submits that the subject matters of Claims 1-8 are not anticipated by Ishii et al., are therefore not unpatentable under 35 U.S.C. § 102, and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 102.

In the Office Action, beginning at page 8, Claims 1-8 were rejected under 35 U.S.C. § 102(b), as reciting subject matters that allegedly are anticipated by Hitoshi. Applicant respectfully requests reconsideration of this rejection.

Again, as stated above, Claim 1 has been amended to incorporate the features of claim 8. Hitoshi et al. does not disclose or suggest a *Bacillus* bacterium which is deficient in a gene or genes selected from the group consisting of the *purR* gene, the *purA* gene and the *deoD* gene, and combinations thereof. Furthermore, this limitation is not a process limitation, as suggested by the Office Action, since there are no recited method or

process steps, nor is there any implication of such, but this limitation recites a characteristic of the product bacterium. For example, this limitation clearly implies a structural deficiency of the claimed bacterium, i.e. that it lacks the presence of one or more of these genes. The cited reference fails to teach this limitation, and there is no indication that such a feature would be inherent. Therefore, the claimed invention is not anticipated by the cited document.

For at least the foregoing reasons, Applicant respectfully submits that the subject matters of Claims 1-8 are not anticipated by Hitoshi, are therefore not unpatentable under 35 U.S.C. § 102, and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 102.

In the Office Action, beginning at page 10, Claims 1-8 were rejected under 35 U.S.C. § 102(b), as reciting subject matters that allegedly are anticipated by Japanese Patent Publication No. 52-154595 ("Ajinomoto"). Applicant respectfully requests reconsideration of this rejection.

As stated above, Claim 1 has been amended to incorporate the features of claim 8. Ajinomoto does not disclose or suggest a *Bacillus* bacterium which is deficient in a gene selected from the group consisting of the *purR* gene, the *purA* gene and the *deoD* gene, and combinations thereof. Furthermore, this limitation is not a process limitation, as suggested by the Office Action, since there are no recited method or process steps, nor is there any implication of such, but this limitation recites a characteristic of the product bacterium. For example, this limitation clearly implies a structural deficiency of the claimed bacterium, i.e. that it lacks the presence of one or more of these genes. The cited reference fails to teach this limitation, and there is no indication that such a feature would be inherent. Therefore, the claimed invention is not anticipated by the cited document.

For at least the foregoing reasons, Applicant respectfully submits that the subject matters of Claims 1-8 are not anticipated by Japanese Patent Publication No. JP52-

154595, are therefore not unpatentable under 35 U.S.C. § 102, and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 102.

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Conclusion

For at least the foregoing reasons, Applicant respectfully submits that the present

patent application is in condition for allowance. An early indication of the allowability of

the present patent application is therefore respectfully solicited.

If Examiner Ford believes that a telephone conference with the undersigned

would expedite passage of the present patent application to issue, she is invited to call on

the number below.

It is not believed that extensions of time are required, beyond those that may

otherwise be provided for in accompanying documents. However, if additional

extensions of time are necessary to prevent abandonment of this application, then such

extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and the

Commissioner is hereby authorized to charge fees necessitated by this paper, and to credit

all refunds and overpayments, to our Deposit Account 50-2821.

Respectfully submitted,

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